

**ABSTRACT OF THE DISCLOSURE**  
**AUTOMATED HANDLING AND INTERFACE MECHANISM**  
**FOR LIBRARY OF DISK DRIVE CARRIERS**

5           A picking tool for an automated library of disk drive carriers has a body with a large guide pin, and a pair of electromagnets. The guide pin has an optical service interface at its tip. A disk drive is mounted to a carrier having a front bezel with a tapered hole that is complementary to the guide pin. The hole provides access to an optical service interface linked to the disk drive. The bezel also has a pair of  
10       embedded magnets located adjacent to its front surface. The carrier is located in and interconnected with a slot in an automated disk drive library. The guide pin is inserted into the hole so that the interfaces interconnect. The carrier is removed from the slot by activating the electromagnets on the picking tool to attract the magnets in the bezel. The tool picker then pulls the carrier out of the slot while supporting the  
15       weight of the carrier on the guide pin. The carrier is released from the picking tool by reversing the current through the electromagnets to repel the magnets in the carrier. The guide pin is then smoothly withdrawn from the hole by backing the picking tool away from the carrier.  
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